IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor:

Noriyuki UMEZAWA et al.

Title:

METHOD AND APPARATUS FOR DISCRIMINATING TONER BOTTLE TYPES, STIRRING TONER, AND DETECTING THE

AMOUNT OF REMARKING TONER, AND DETECTIVE

AMOUNT OF REMAINING TONER

Serial Number:

10/658,849

Filing Date:

September 10, 2003

Original Patent:

6,289,182

BROADENING REISSUE DECLARATION UNDER 37 C.F.R. §1.175

Assistant Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

We, Noriyuki Umezawa, Takayuki Nishi, Yoshiharu Taniyama, and Shinichi Itoh declare as follows:

- Our residence, post office address and citizenship are stated below next to our names.
- 2. We believe that we are the original and first inventors of the subject matter described and claimed in U.S. Patent 6,289,182 and in the foregoing specification for which a reissue patent is sought on the invention entitled METHOD AND APPARATUS FOR DISCRIMINATING TONER BOTTLE TYPES, STIRRING TONER AND DETECTING THE AMOUNT OF REMAINING TONER.
- 3. We have reviewed and understand the contents of the above-identified specification, including the claims added in the reissue application and amended by way of a Preliminary Amendment being filed concurrently herewith.
- 4. We acknowledge the duty to disclose information which is material to examination of the application in accordance with 37 C.F.R. § 1.56.

- 5. We believe U.S. Patent No. 6,289,182 ("the '182 patent") is wholly or partly inoperative or invalid by reason of our claiming more or less than we had the right to claim in the patent.
- 6. One specific error was for us not to include claims 14-21, 27-28, 30, 32-35, 37-40, 42-43, and 45-54 as recited in the Preliminary Amendment being filed concurrently herewith.
- 7. By this reissue declaration, we desire to seek broadened claims, and this application for reissue of the original Letters Patent addresses the aforementioned error by including new independent claims 14, 21, 35, and 40, which do not recite unnecessary features of claims 6 and 10 that are directed to a toner bottle, including but not limited to a motor for rotating a toner bottle, a motor driver for driving the motor, and a CPU for controlling the motor driver in the manner recited. Further, these independent claims, as well as dependent claims 15-20, 27-28, 30, 32-34, 37-39, 42-43, and 45-54 define the toner bottle of the present invention with the variety in scope and the degree of specificity necessary to adequately protect the invention. Support for the claims 14-21, 27-28, 30, 32-35, 37-40, 42-43, and 45-54 exists, for example, in Figures 2-7 of the Letters Patent and in column 4, line 59 column 7, line 19 and column of the specification. As for claims 18-20 and 34, exemplary support for an image forming apparatus is found in Figure 1, along with the above-referenced disclosure.
- 8. We further believe that the '182 patent is wholly or partly inoperative or invalid by reason of our error of inadvertently failing to name Yoshiharu Taniyama and Shin chi Itoh as inventors of claims of the '182 patent, in addition to Noriyuki Umezawa and Takayuki Nishi. For example, as to claims 1-10 of the '182 patent as issued, Yoshiharu Taniyama and Shinichi Itoh contributed to the conception of the toner bottle configuration, including an object formed at a predetermined portion of the toner bottle, which object is sensed to discriminate toner bottle type. Noriyuki Umezawa and Takayuki Nishi contributed to the recited manner for sensing the object to perform discrimination. Further, as to the added claims 14-21, 27-28, 30, 32-35, 37-40, 42-43, and 45-54, Yoshiharu Taniyama and Shinichi Itoh contributed to the claimed configuration of the toner bottle. Where recited in the new claims, Noriyuki Umezawa and Takayuki Nishi contributed to the recited manner for sensing the rib on the toner bottle.

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Atty. Dkt. No. 047373-0148

Accordingly, Yoshiharu Taniyama, Shinichi Itoh, Noriyuki Umezawa, and Takayuki Nishi are the proper inventors for the original '182 patent and for the present reissue application.

9. All errors that are being corrected in the present reissue application up to the time of the filing of this declaration arose without any deceptive intention on our part.

WHEREFORE, we pray that we may be allowed to surrender the original Letters Patent 6,289,182 upon an indication that the claimed subject matter in this application is allowable, and do hereby offer same.

WE HEREBY APPOINT the registered attorneys and agents at Customer Number 22428

Customer Number: 22428

to have full power to prosecute this application and any continuations, divisions, reissues, and reexaminations thereof, to receive the patent, and to transact all business in the United States Patent and Trademark Office connected therewith.

We request that all correspondence be directed to:

Pavan K. Agarwal FOLEY & LARDNER Customer Number: 22428

Telephone: (202) 945-6162 Facsimile: (202) 672-5399

The undersigned petitioner declares further that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under sec ion 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

NORIYUKI UMEZAWA
Signature: Noriyuki Umezama Date: Feb. 24, 2004
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YOSHIHARU TANIYAMA
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 047373-0148

n re reissue patent application of:

Noriyuki UMEZAWA et al.

Application for Reissue of U.S. Patent No. 6,289,182 issued September 11, 2001

Serial No: 10/658,849

Filed: September 10, 2003

For: METHOD AND APPARATUS FOR DISCRIMINATING TONER BOTTLE TYPES,

STIRRING TONER, AND DETECTING THE AMOUNT OF REMAINING TONER

CONSENT OF ASSIGNEE

Mail Stop Missing Parts Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

The assignee owning all (undivided) interest in said original patent is TOSHIBA TEC KABUSHIKI KAISHA, and the assignee consents to the application for reissue identified above. A Certificate Under 37 C.F.R. 3.73(b) is also being submitted concurrently herewith.

Date: February 19, 2004

Name: <u>Toshio HOKIMOTO</u>

Title: Senior Manager

Signature: Jackie Jake to

N THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 047373-0148

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Application for Reissue of U.S. Patent No. 6,289,182 issued September 11, 2001

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STIRRING TONER, AND DETECTING THE AMOUNT OF REMAINING TONER

CERTIFICATE UNDER 37 C.F.R. § 3.73(b)

Mail Stop Missing Parts Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

TOSHIBA TEC KABUSHIKI KAISHA certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of either:

A. [X] An assignment from the inventor(s) of the patent identified above. The assignment was recorded in the U.S. Patent and Trademark Office at
Reel 010889, Frame 0623 on June 12, 2000, or for which a copy thereof is attached.
O,R
B. [] A chain of title from the inventor, of the parent application identified above, to the current assignee as shown below.
1. From:
To:
[] Additional documents in the chain of title are listed on a supplemental sheet.
[] Copies of assignments or other documents in the chain of title are attached.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of the undersigned's knowledge and belief, title

Reissue of U.S. Patent No. 6,289,182 Serial No. 10/658,849

is the assignee identified above.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

I, hereby declare that all statements made herewith of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements, and the like so make, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: February 19, 2004

Name: Toshio HOKIMOTO

Title: Senior Manager

Signature: Jaskin dokunto